NIAGARA REGION WIND FARM WATER ASSESSMENT AND WATER BODY REPORT

Appendix B

Photographic Record



Photo 1: Station 65-3 – Wolf Creek Drain (Summer 2012) - Facing upstream (northwest) from Shafley Road, showing channel overview from culvert.



Photo 3: Station 65-4 – North Forks Drain (Summer 2012) - Facing upstream (west) from Shafley Road, showing channel overview and surrounding riparian vegetation.



Photo 5: Station 68-1 – North Forks Drain (Summer 2012) - Facing upstream (southwest) from Hutchinson Road, showing channel overview and surrounding riparian vegetation.





Photo 2: Station 65-3 – Wolf Creek Drain (Summer 2012) - Facing downstream (southeast) from Shafley Road, showing channel overview from culvert.



Photo 4: Station 65-4 – North Forks Drain (Summer 2012) - Facing downstream (east) from Shafley Road, showing channel overview and instream vegetation.



Photo 6: Station 68-1 – North Forks Drain (Summer 2012) - Facing downstream (northeast) from Hutchinson Road, showing

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Photo 7: Station 72-1 – Ellsworth Drain (Summer 2012) - Facing downstream (northeast) from Hutchinson Road, showing channel overview and surrounding cropland.



Photo 9: Station 71-1 – Ellsworth Drain (Summer 2012) - Facing downstream (east) from Hendershot Road, showing channel overview and surrounding cropland.



Photo 11: Station 69-2 – South Forks Drain (Summer 2012) - Facing downstream (south) from Hutchinson Road, showing channel overview and instream vegetation.





Photo 8: Station 71-1 – Ellsworth Drain (Summer 2012) - Facing upstream (west) from Hendershot Road, showing channel overview.



Photo 10: Station 69-2 – South Forks Drain (Summer 2012) - Facing upstream (north) from Hutchinson Road, showing channel overview.



Photo 12: Station 69-1 – South Forks Drain (Summer 2012) - Facing upstream (west) from Hutchinson Road, showing channel overview.

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Photo 13: Station 69-1 – South Forks Drain (Summer 2012) - Facing downstream (east) from Hutchinson Road, showing channel overview.



Photo 15: Station 70-1 – South Forks Drain (Summer 2012) - Facing downstream (east) from Hutchinson Road, showing channel overview and surrounding vegetation.



Photo 17: Station 66-2 – Big Forks Creek (Summer 2012) - Facing downstream (northeast) from Wellandport Road, showing channel overview.





Photo 14: Station 70-1 – South Forks Drain (Summer 2012) - Facing upstream (west) from Hutchinson Road, showing channel overview.



Photo 16: Station 66-2 – Big Forks Creek (Summer 2012) - Facing upstream (south) from Wellandport Road, showing channel overview.



Photo 18: Station 66-1 – Big Forks Creek (Summer 2012) - Facing upstream (west) from Wellandport Road, showing agricultural swale.

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Photo 19: Station 66-1 – Big Forks Creek (Summer 2012) - Facing downstream (east) from Wellandport Road, showing channel overview.



Photo 21: Station 65-2 – Big Forks Creek (Summer 2012) - Facing downstream (east) from Wellandport Road, showing channel overview.



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Photo 23: Station 65-1 – Big Forks Creek (Summer 2012) - Facing downstream (south) from Wellandport Road, showing channel overview.





Photo 20: Station 65-2 – Big Forks Creek (Summer 2012) - Facing upstream (west) from Wellandport Road, showing Reed Canary grass channel.



Photo 22: Station 65-1 – Big Forks Creek (Summer 2012) - Facing upstream (north) from Wellandport Road, showing channel overview and instream vegetation.



Photo 24: Station 65-1 – East Kelly Drain (Summer 2012) - Facing upstream (north) from Hutchinson Road, showing channel overview.

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Photo 25: Station 65-1 – East Kelly Drain (Summer 2012) - Facing downstream (south) from Hutchinson Road, showing channel overview.



Photo 27: Station 75-1 – East Kelly Drain (Summer 2012) - Facing downstream (southeast) from Booker Road, showing channel and surrounding vegetation.



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Photo 29: Station 73-2 – East Kelly Drain (Summer 2012) - Facing upstream (west) from Dunnville/WainfleetTownline, showing dredged ditch.





Photo 26: Station 65-1 – East Kelly Drain (Summer 2012) - Facing upstream (north) from Hutchinson Road, showing channel substrate.



Photo 28: Station 75-1 – East Kelly Drain (Summer 2012) - Facing downstream (southeast) from Booker Road, showing channel and surrounding vegetation.



Photo 30: Station 73-2 – East Kelly Drain (Summer 2012) - Facing downstream (southeast) from Dunnville/Wainfleet Townline, showing dredged ditch.

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Photo 31: Station 73-1 – East Kelly Drain (Summer 2012) - Facing upstream (west) from Hendershot Road, showing channel overview.



Photo 33: Station 9-2 – Wolf Creek Drain West (Fall 2012) - Facing downstream (east) from Sideroad 44, showing channel and surrounding agricultural land.



Photo 35: Station 10-1– Wolf Creek Drain West (Fall 2012) - Facing upstream (northeast) from Sideroad 44, showing channel and surrounding riparian vegetation.



Photo 32: Station 73-1 – East Kelly Drain (Summer 2012) - Facing downstream (northeast) from Hendershot Road, showing channel and surrounding riparian vegetation.



Photo 34: Station 9-2 – Wolf Creek Drain West (Fall 2012) - Facing north along west side of Sideroad 44, showing channel overview.



Photo 36: Station 10-1– Wolf Creek Drain West (Fall 2012) - Facing upstream (southwest) from Sideroad 44, showing channel overview from bridge.

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Big Forks Creek PHOTOGRAPHIC RECORD

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Photo 37: Station 12-2 – Big Forks Creek (Fall 2012) - Facing upstream (west) from Jenny Jump Road, showing channel and surrounding riparian vegetation.



Photo 39: Station 13-5 – East Kelly Drain (Fall 2012) - Facing downstream (south) from Booker Road, showing channel and surrounding riparian vegetation.



Photo 41: Station 13-6 – East Kelly Drain (Fall 2012) - Facing upstream (north) from Booker Road, showing channel overview and adjacent agricultural field.



Photo 38: Station 12-2 – Big Forks Creek (Fall 2012) - Facing downstream (east) from Jenny Jump Road, showing channel and surrounding riparian vegetation.



Photo 40: Station 13-5 – East Kelly Drain (Fall 2012) - Facing downstream (east) from along Booker Road, showing channel and surrounding riparian vegetation.



Photo 42: Station 13-6 – East Kelly Drain (Fall 2012) - Facing downstream (south) from Booker Road, showing channel and surrounding riparian vegetation.

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Photo 43: Station 13-7 – East Kelly Drain (Fall 2012) - Facing upstream (west) from Dunnville/Wainfleet Townline, showing channel overview.



Photo 45: Station 13-8 - Mill Race Creek (Fall 2012) - Facing upstream (west) from Poth Road, showing channel overview.



Photo 47: Station 14-1 - Mill Race Creek (Fall 2012) - Facing upstream (north) from Dunnville/Wainfleet Townline, showing channel overview alongside the road.



Photo 44: Station 13-7 – East Kelly Drain (Fall 2012) - Facing downstream (east) from Dunnville/Wainfleet Townline, showing channel overview.



Photo 46: Station 13-8 - Mill Race Creek (Fall 2012) - Facing downstream (east) from Poth Road, showing channel overview.



Photo 48: Station 14-1 - Mill Race Creek (Fall 2012) - Facing downstream (east) from Dunnville/Wainfleet Townline, showing channel and adjacent scrubland.

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Photo 49: Station 15-3 - Mill Race Creek (Fall 2012) - Facing upstream (west) from Dunnville/Wainfleet Townline, showing channel and adjacent corn field.



Photo 51: Station 15-4 - Mill Race Creek (Fall 2012) - Facing downstream (east) from Canal Bank Road, showing channel and surrounding manicured lawn.



Photo 50: Station 15-3 - Mill Race Creek (Fall 2012) - Facing downstream (east) from Dunnville/Wainfleet Townline, showing channel overview.



Photo 52: Station 15-5 - Mill Race Creek (Fall 2012) - Facing upstream (south) from Hutchinson Road right-of-way, showing channel through roadside trees.



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Photo 1 Station 51-1 – Sixteen Mile Creek (Summer 2012) - Facing upstream (northwest) from Regional Road 20, showing channel overview with abundant cattails.



Photo 3 Station 51-2 – Sixteen Mile Creek (Summer 2012) - Facing upstream (west) from Regional Road 569, showing channel overview and surrounding vegetation.



Photo 5 Station 54-1 – Sixteen Mile Creek (Summer 2012) - Facing upstream (west) from Fifteen Road, showing channel overview and surrounding vegetation.



Photo 2 Station 51-1 – Sixteen Mile Creek (Summer 2012) - Facing downstream (southeast) from Regional Road 20, showing channel overview.



Photo 4 Station 51-2 – Sixteen Mile Creek (Summer 2012) - Facing downstream (east) from Regional Road 569, showing channel overview and surrounding vegetation.



Photo 6 Station 54-1 – Sixteen Mile Creek (Summer 2012) - Facing downstream (east) from Fifteen Road, showing channel overview and surrounding vegetation.

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Photo 7 Station 54-1 – Sixteen Mile Creek (Summer 2012) – Showing culvert and pooling water.



Photo 9 Station 56-4 – Fifteen Mile Creek (Summer 2012) - Facing downstream (north), south of Concession 4, showing dry channel.



Photo 11 Station 56-2 – Fifteen Mile Creek (Summer 2012) - Facing upstream (west) from Hodgkin Road, showing surficial drainage.



Photo 8 Station 56-4 – Fifteen Mile Creek (Summer 2012) - Facing upstream (west), south of Concession 4, showing channel overview.



Photo 10 Station 56-4 – Fifteen Mile Creek (Summer 2012) – Showing aquatic vegetation in channel.



Photo 12 Station 56-2 – Fifteen Mile Creek (Summer 2012) - Facing downstream (east), north of Concession 4, showing channel overview.

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Photo 13 Station 56-3 – Fifteen Mile Creek (Summer 2012) - Facing upstream (south) south of Concession 4, showing non-water body.



Photo 15 Station 56-1 – Fifteen Mile Creek (Summer 2012) - Facing upstream (south) north of Concession 4, showing drainage feature with no channel definition.



Photo 17 Station 57-3 – Fifteen Mile Creek (Summer 2012) - Facing upstream (west) from Rosedene Road, showing channel and instream vegetation.



Photo 14 Station 56-3 – Fifteen Mile Creek (Summer 2012) - Facing upstream (south) south of Concession 4, showing surficial drainage.



Photo 16 Station 56-1 – Fifteen Mile Creek (Summer 2012) - Facing downstream (north) south of Concession 4, showing non-water body.



Photo 18 Station 57-3 – Fifteen Mile Creek (Summer 2012) - Facing downstream (east) from Rosedene Road, showing channel.

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Photo 19 Station 57-3 – Fifteen Mile Creek (Summer 2012) – Showing water at culvert and creek substrate.



Photo 21 Station 57-2 – Fifteen Mile Creek (Summer 2012) - Facing upstream (north) from Concession 4, showing channel with reed canary grass.



Photo 23 Station 57-1 – Fifteen Mile Creek (Summer 2012) - Facing downstream (northeast) from Concession 4, showing non-water body overview.



Photo 20 Station 57-2 – Fifteen Mile Creek (Summer 2012) - Facing upstream (south) from Concession 4, showing channel overview.



Photo 22 Station 57-1 – Fifteen Mile Creek (Summer 2012) - Facing upstream (south) from Concession 4, showing non-water body overview.



Photo 24 Station 57-1 – Fifteen Mile Creek (Summer 2012) – Facing south, showing culvert and terrestrial vegetation in channel.

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Photo 25 Station 58-2 – Fifteen Mile Creek (Summer 2012) - Facing upstream (south) from Concession 4, showing channel overview with reed canary grass.



Photo 27 Station 58-2 – Fifteen Mile Creek (Summer 2012) – Showing substrate of creek bed.



Photo 29 Station 58-3 – Fifteen Mile Creek (Summer 2012) - Facing downstream (north) from Concession 4, showing non-water body.



Photo 26 Station 58-2 – Fifteen Mile Creek (Summer 2012) - Facing downstream (north) from Concession 4, showing non-water body overview.



Photo 28 Station 58-3 – Fifteen Mile Creek (Summer 2012) - Facing upstream (south) from Concession 4, showing non-water body.



Photo 30 Station 58-1 – Fifteen Mile Creek (Summer 2012) - Facing upstream (west) from Concession 4, showing non-water body and surrounding manicured lawn.

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Photo 31 Station 58-1 – Fifteen Mile Creek (Summer 2012) - Facing downstream (east) from Concession 4, showing channel overview and surrounding land.



Photo 33 Station 55-1 – Fifteen Mile Creek (Summer 2012) - Facing upstream (west) from Concession 4, showing channel overview along roadside.



Photo 35 Station 55-1 – Fifteen Mile Creek (Summer 2012) – Showing substrate of creek bed with instream aquatic vegetation.



Photo 32 Station 58-1 – Fifteen Mile Creek (Summer 2012) – Showing substrate of creek bed.



Photo 34 Station 55-1 – Fifteen Mile Creek (Summer 2012) - Facing downstream (north) from Concession 4, showing channel overview and surrounding vegetation.



Photo 36 Station 59-1 – Fifteen Mile Creek (Summer 2012) - Facing downstream (west) from Victoria Avenue, showing surficial drainage in field.

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Photo 37 Station 59-2 – Fifteen Mile Creek (Summer 2012) - Facing downstream (west) from Victoria Avenue, showing surficial drain in field.



Photo 39 Station 60-1 – Fifteen Mile Creek (Summer 2012) - Facing downstream (east) from Victoria Avenue showing channel overview and surrounding vegetation.



Photo 38 Station 60-1 – Fifteen Mile Creek (Summer 2012) - Facing upstream (west) from Victoria Avenue showing channel overview.



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Photo 1: Station 77-1 – Tweed Drain (Summer 2012) - Facing upstream (northeast) from Bird Road, showing channel overview.



Photo 3: Station 78-1 –Broad Creek Drain (Summer 2012) - Facing upstream (southeast) from Canal Bank Road, showing channel overview.



Photo 5: Station 81-1 – Broad Creek Drain (Summer 2012) - Facing downstream (south) from Bird Road, showing channel overview.





Photo 2: Station 77-1 – Tweed Drain (Summer 2012) - Facing downstream (southwest) from Bird Road, showing channel overview.



Photo 4: Station 81-1 – Broad Creek Drain (Summer 2012) - Facing upstream (north) from Bird Road, showing channel overview.



Photo 6: Station 80-1 – Broad Creek Drain (Summer 2012) - Facing upstream (east) from Rymer Road, showing channel overview.

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Grand River PHOTOGRAPHIC RECORD



Station 80-1 – Broad Creek Drain (Summer 2012) - Facing downstream (west) from Rymer Road, showing channel overview.

Photo 7:



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Title Grand River PHOTOGRAPHIC RECORD



Photo 1 Station 6-1 – Thirty Mile Creek (Summer 2012) - Facing downstream (west) at Thirty Road, north of Kemp Road. Showing surficial drain overview.



Photo 3 Station 5-1 – Thirty Mile Creek (Summer 2012) - Facing upstream (southwest) from Ridge Road East, showing channel overview.



Photo 5 Station 5-2 – Thirty Mile Creek (Summer 2012) - Facing upstream (southeast) from Thirty Road showing channel overview.



Photo 2 Station 6-1 – Thirty Mile Creek (Summer 2012) - Facing upstream (east) at Thirty Road, north of Kemp Road. Showing non-waterbody overview.



Photo 4 Station 5-1 – Thirty Mile Creek (Summer 2012) - Facing downstream (northeast) from Ridge Road East, showing channel overview.



Photo 6 Station 5-2 – Thirty Mile Creek (Summer 2012) - Facing downstream (northwest) from Thirty Road showing channel overview.

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Photo 7 Station 2-1 – Thirty Mile Creek (Summer 2012) – Facing upstream (north) from King Street showing channel overview.



Photo 9 Station 4-1– Beamsville Creek (Summer 2012) - Facing upstream (west) from Mountainview Road, showing channel overview.



Photo 11 Station 3-3– Beamsville Creek (Summer 2012) - Facing downstream (east) from Mountainview Road, showing channel overview.



Photo 8 Station 2-1 – Thirty Mile Creek (Summer 2012) – Facing downstream (south) from King Street showing channel overview.



Photo 10 Station 4-1– Beamsville Creek (Summer 2012) - Facing downstream (east) from Mountainview Road, showing channel overview.



Photo 12 Station 3-2– Beamsville Creek (Summer 2012) - Facing upstream (south) from Mountainview Road, showing channel overview and riparian vegetation.

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Photo 13 Station 3-2– Beamsville Creek (Summer 2012) - Facing upstream (southeast) from Mountainview Road, showing channel overview and surrounding canopy.



Photo 15 Station 3-1– Beamsville Creek (Summer 2012) - Facing south, showing drainage ditch along west side of Mountainview Road.



Photo 17 Station 2-3– Beamsville Creek (Summer 2012) – Facing upstream (southwest) on south side of King Street, showing drainage feature through thick vegetation.



Photo 14 Station 3-2– Beamsville Creek (Summer 2012) - Facing west from Mountainview Road, showing sunken culvert.



Photo 16 Station 3-1– Beamsville Creek (Summer 2012) - Facing downstream (northeast), showing waterbody on east side of Mountainview Road.



Photo 18 Station 2-3– Beamsville Creek (Summer 2012) - Facing downstream (northwest), from Mountainview Road, showing channel and surrounding vegetation.

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Photo 19 Station 2-3– Beamsville Creek (Summer 2012) - Facing upstream (south), from Mountainview Road, showing drainage feature along the roadside.



Photo 20 Station 2-2– Lake Ontario 24 (Summer 2012) - Facing upstream (southwest), south of King Street, showing channel.



Photo 21 Station 2-2– Lake Ontario 24 (Summer 2012) - Facing downstream (northwest), south of King Street, showing channel.



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Photo 1: Station 28-1 – Tributary to the Welland River (Summer 2012) - Facing upstream (northwest) from Port Davidson Road, showing channel overview.



Photo 3: Station 29-1 – Tributary to the Welland River (Summer 2012) - Facing upstream (northwest) from Port Davidson Road, showing Reed Canary grass channel.



Photo 5: Station 30-1 – Tributary to the Welland River (Summer 2012) - Facing upstream (west) from Canborough Road, showing Reed Canary grass channel.





Photo 2: Station 28-1 – Tributary to the Welland River (Summer 2012) - Facing downstream (southeast) from Port Davidson Road, showing channel overview.



Photo 4: Station 29 -1 – Tributary to the Welland River (Summer 2012) - Facing downstream (southeast) from Port Davidson Road, showing channel overview.



Photo 6: Station 30 -1 – Tributary to the Welland River (Summer 2012) - Facing upstream (west) from Canborough Road, looking down at channel within Reed Canary grass.

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Photo 7: Station 30 -1 – Tributary to the Welland River (Summer 2012) - Facing downstream (southeast) from Canborough Road, showing channel overview.



Photo 9: Station 31 -1 – Tributary to the Welland River (Summer 2012) - Facing upstream (southeast) from Creek Road, showing culvert leading into agricultural swale.



Photo 11: Station 31 -2 – Tributary to the Welland River (Summer 2012) - Facing upstream (southeast) from Creek Road, showing Reed Canary grass channel.





Photo 8: Station 31 -1 – Tributary to the Welland River (Summer 2012) - Facing upstream (southeast) from Creek Road, showing non-water body.



Photo 10: Station 31 -1 – Tributary to the Welland River (Summer 2012) - Facing downstream (northwest) from Creek Road, looking down at grassed swale and surrounding vegetation.



Photo 12: Station 31 -2 – Tributary to the Welland River (Summer 2012) - Facing downstream (northwest) from Creek Road, showing channel in Reed Canary grass.

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Photo 13: Station 32 -1 – Tributary to the Welland River (Summer 2012) - Facing upstream (south) from Creek Road, showing channel definition.



Photo 15: Station 32 -1 – Tributary to the Welland River (Summer 2012) – On upstream side of Creek Road, showing substrate of channel.



Photo 17: Station 35 -3 – Welland River (Summer 2012) - Facing downstream (north) from Riverside Drive, showing channel overview.





Photo 14: Station 32 -1 – Tributary to the Welland River (Summer 2012) - Facing downstream (north) from Creek Road, showing Reed Canary grass channel.



Photo 16: Station 35 -3 – Welland River (Summer 2012) – Facing upstream (south), from Riverside Drive, showing channel overview.



Photo 18: Station 6-2 – Upper Welland River (Fall 2012) - Facing east from Krick Road, showing drainage feature within pasture.

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Photo 19: Station 6-2 – Upper Welland River (Fall 2012) - Facing west from Krick Road, showing tiled drainage feature and catch basin within pasture.



Photo 21: Station 6-3 – Upper Welland River (Fall 2012) - Facing upstream (southwest) from Krick Road, showing channel overview from culvert.



Photo 20: Station 6-3 – Upper Welland River (Fall 2012) - Facing upstream (southwest) from Krick Road, showing channel overview within field.



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Photo 1 Station 9-1 – Spring Creek (Summer 2012) - Facing upstream (west) from Thirty Road showing channel overview.



Photo 3 Station 8-1 – Spring Creek (Summer 2012) - Facing upstream (west) from Thirty Road showing channel flowing from bush lot.



Photo 5 Station 12-1 – Twenty Mile Creek (Summer 2012) - Facing downstream (east) from South Grimsby Road 6, showing drainage feature.



Photo 2 Station 9-1 – Spring Creek (Summer 2012) - Facing downstream (east) from Thirty Road showing channel overview and surrounding agricultural land.



Photo 4 Station 12-1 – Twenty Mile Creek (Summer 2012) - Facing upstream (west) from South Grimsby Road 6, showing drainage feature.



Photo 6 Station 11-2 – Twenty Mile Creek (Summer 2012) - Facing upstream (northwest) from South Grimsby Road 6, showing channel overview from bridge.

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Photo 7 Station 11-2 – Twenty Mile Creek (Summer 2012) - Facing downstream (southeast) from South Grimsby Road 6, showing channel from bridge.



Photo 9 Station 11-1 – Twenty Mile Creek (Summer 2012) - Facing upstream (north) from South Grimsby Road 6, showing non-water body.



Photo 11 Station 13-3 – North Creek (Summer 2012) - Facing upstream (west) from Tober Road, showing channel overview.



Photo 8 Station 11-2 – Twenty Mile Creek (Summer 2012) – Showing substrate of the creek bed.



Photo 10 Station 11-1 – Twenty Mile Creek (Summer 2012) - Facing downstream (southeast) from South Grimsby Road 6, showing non-water body.



Photo 12 Station 13-3 – North Creek (Summer 2012) – Facing downstream (southeast) from Tober Road, showing channel and surrounding cattails.

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Photo 13 Station 15-1 – North Creek (Summer 2012) - Facing upstream (northwest) from Tober Road, showing surficial drain.



Photo 15 Station 15-2 – North Creek (Summer 2012) - Facing upstream (west) from Tober Road, showing non- water body.



Photo 17 Station 14-1 – North Creek (Summer 2012) - Facing west from Port Davidson Road, showing cross-section of surficial drain in agricultural field.



Photo 14 Station 15-1 – North Creek (Summer 2012) – Facing downstream (southeast) from Tober Road, showing surficial drain.



Photo 16 Station 15-2 – North Creek (Summer 2012) – Facing downstream (east) from Tober Road, showing non-water body.



Photo 18 Station 16-1 – North Creek (Summer 2012) - Facing upstream (northwest) from Port Davidson Road, showing channel overview.

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Photo 19 Station 16-1 – North Creek (Summer 2012) – Facing upstream (northwest) from Port Davidson Road, showing channel and culvert.



Photo 21 Station 16-2 – North Creek (Summer 2012) – Facing upstream (west) from Port Davidson Road, showing surficial drain in agricultural field.



Photo 23 Station 16-3 – North Creek (Summer 2012) – Facing upstream (west) from Port Davidson Road, showing channel and reed canary grass.



Photo 20 Station 16-1 – North Creek (Summer 2012) – Facing downstream (east) from Port Davidson Road, showing channel overview.



Photo 22 Station 16-2 – North Creek (Summer 2012) – Facing downstream (east) from Port Davidson Road, showing channel overview.



Photo 24 Station 16-3 – North Creek (Summer 2012) – Facing downstream (east) from Port Davidson Road, showing channel overview.

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Photo 25 Station 18-1 – North Creek (Summer 2012) – Facing upstream (west) from Port Davidson Road, showing nonwater body.



Photo 27: Station WR2 – Spring Creek (Summer 2012) – Facing upstream (west) from Walker Road, showing shallow channel on west side of road.



Photo 29: Station WR1 – Spring Creek (Summer 2012) – Facing downstream (east) from Walker Road, showing channel overview.



Photo 26 Station 18-1 – North Creek (Summer 2012) – Facing downstream (east) from Port Davidson Road, showing channel overview.



Photo 28: Station WR2 – Spring Creek (Summer 2012) – Facing downstream (east) from Walker Road, showing channel overview.



Photo 30: Station WR1 – Spring Creek (Summer 2012) – From Walker Road, showing channel's substrate comprised of silt.

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Photo 31: Station FR1 – Spring Creek (Summer 2012) – Facing upstream (west) from Fly Road, showing shallow channel.



Photo 33: Station FR4 – Spring Creek (Summer 2012) – Facing upstream (west) from Fly Road, showing channel overview.



Photo 35: Station FR4 – Spring Creek (Summer 2012) – From Fly Road, showing channel and substrate from culvert.



Photo 32: Station FR1 – Spring Creek (Summer 2012) – Facing downstream (east) from Fly Road, showing channel from culvert.



Photo 34: Station FR4 – Spring Creek (Summer 2012) – Facing downstream (east) from Fly Road, showing channel overview.



Photo 36: Station FR3 – Spring Creek (Summer 2012) – Facing downstream (east) from Fly Road, showing straightened channel overview from culvert.

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Photo 37: Station FR3 – Spring Creek (Summer 2012) – From Fly Road, showing channel and substrate from culvert.



Photo 39: Station SGR3-3 – Spring Creek (Summer 2012) – Facing downstream (east) from South Grimsby Road 3, showing channel overview from culvert.



Photo 41: Station SGR3-1 – Spring Creek (Summer 2012) – Facing downstream (east) from South Grimsby Road 3, showing channel overview from culvert.



Photo 38: Station SGR3-3 – Spring Creek (Summer 2012) – Facing upstream (west) from South Grimsby Road 3, showing channel and surrounding bushlot.



Photo 40: Station SGR3-1 – Spring Creek (Summer 2012) – Facing upstream (west) from South Grimsby Road 3, showing channel and surrounding agricultural field.



Photo 42: Station SGR3-1 – Spring Creek (Summer 2012) – From South Grimsby Road 3, showing channel and substrate.



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Photo 43: Station Younge-1 – Spring Creek (Summer 2012) – Facing upstream (west) from Younge Road, showing channel overview alongside road.



Station Younge-1 – Spring Creek (Summer 2012) – From Younge Road, showing channel and substrate comprised of silt. Photo 45:



Station Younge-1 – Spring Creek (Summer 2012) – Facing downstream (east) from Younge Road, showing channel overview alongside road. Photo 44:

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Twenty Mile Creek PHOTOGRAPHIC RECORD



Photo 1: Station R11T012-1 – North Forks Drain (Summer 2012) -Facing upstream (east) north of Highway 3, showing channel in forested area.



Photo 3: Station R11T013-2 – North Forks Drain (Summer 2012) -Facing upstream (east) north of Highway 3, showing channel overview.





Photo 2: Station R11T012-1 – North Forks Drain (Summer 2012) North of Highway 3, showing substrate of channel and aquatic vegetation.



Photo 4: Station R11T013-2 – North Forks Drain (Summer 2012) -Facing downstream (west) north of Highway 3, showing channel overview.



Photo 6: Station R11T013-1 – North Forks Drain (Summer 2012) -Facing upstream (east) north of Highway 3, showing agricultural swale.

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Station R11T013-1 - North Forks Drain (Summer 2012) -Photo 7: Facing downstream (west) north of Highway 3, showing agricultural swale.



Photo 9:

Station R11T019H-1 - North Forks Drain (Summer 2012) -Facing downstream (west) north of Highway 3, showing riparian vegetation.



Photo 11: Station R11T082 - North Forks Drain (Summer 2012) -Facing upstream (west) north of Highway 3, showing channel overview.



Station R11T019H-1 – North Forks Drain (Summer 2012) -Facing upstream (east) north of Highway 3, showing channel Photo 8: and riparian vegetation.



Station R11T019H-1 - North Forks Drain (Summer 2012) -Photo 10: North of Highway 3, showing channel's substrate.



Photo 12: Station R11T082 - North Forks Drain (Summer 2012) -Facing downstream (east) north of Highway 3, showing channel overview.

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Photo 13: Station R11T082-2 – North Forks Drain (Summer 2012) -Facing upstream (north) east of Gee Road, showing channel overview.



Photo 15: Station R11T082-2 – North Forks Drain (Summer 2012) – East of Gee Road, showing channel's substrate.



Photo 17: Station R11T065-1 – Ellsworth Drain (Summer 2012) -Facing downstream (east) off of Dunnville Wainfleet Townline, showing channel overview.



Photo 14: Station R11T082-2 – North Forks Drain (Summer 2012) Facing downstream (south) east of Gee Road, showing channel overview.



Photo 16: Station R11T065-1 – Ellsworth Drain (Summer 2012) -Facing upstream (west) off of Dunnville Wainfleet Townline, showing channel overview.



Photo 18: Station R11T013-3 – Big Forks Creek (Summer 2012) -Facing upstream (east) south of Highway 3, showing channel overview and riparian vegetation.

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Photo 19: Station R11T013-3 – Big Forks Creek (Summer 2012) -Facing downstream (west) south of Highway 3, showing channel overview and riparian vegetation.



Photo 21: Station R11T024-1 – Mill Race Creek (Summer 2012) -Facing downstream (east) west of Sideroad 30, showing channel overview and riparian vegetation.



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Photo 23: Station R11T089-1 – East Kelly Drain (Summer 2012) -Facing upstream (north) west of Dunnville Wainfleet Townline, showing channel overview and riparian vegetation.



Photo 20: Station R11T024-1 – Mill RaceCreek (Summer 2012) -Facing upstream (west) west of Sideroad 30, showing channel overview and riparian vegetation.



Photo 22: Station R11T024-1 –Mill Race Creek (Summer 2012) - West of Sideroad 30, showing channel overview and riparian vegetation.



Photo 24: Station R11T084-1 – East Kelly Drain (Summer 2012) -Facing upstream (west) south of Jenny Jumo Road, showing channel overview.

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Photo 25: Station R11T084-1 – East Kelly Drain (Summer 2012) -Facing downstream (east) south of Jenny Jump Road, showing channel overview.



Photo 26: Station R11T089-3 – East Kelly Drain (Summer 2012) -Facing downstream (west) west of Dunnville Wainfleet Townline, showing channel overview and riparian vegetation.



Photo 27: Station R11T089-2 – East Kelly Drain (Summer 2012) -Facing downstream (south) west of Dunnville Wainfleet Townline, showing channel overview and riparian vegetation.



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Photo 1: Station R11T052-2 – Beaver Creek (Summer 2012) - Facing upstream (north) south of Silver Street, showing agricultural swale in field.



Photo 3: Station R11T052-4 – Beaver Creek (Summer 2012) - Facing upstream (north) south of Silver Street, showing agricultural swale in field.



Photo 5: Station R11T052-3 – Beaver Creek (Summer 2012) – Facing east, south of Silver Street, showing tiled lowland in field.



Photo 2: Station R11T052-2 – Beaver Creek (Summer 2012) - Facing downstream (south) south of Silver Street, showing agricultural swale in field.



Photo 4: Station R11T052-3 – Beaver Creek (Summer 2012) - Facing upstream (north) south of Silver Street, showing tile drained feature in field.



Photo 6: Station R11T052-3 – Beaver Creek (Summer 2012) – Facing south, south of Silver Street, showing tiled lowland in field.

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Photo 7: Station R11T052-5 – Beaver Creek (Summer 2012) - Facing upstream (northwest) south of Silver Street, showing tile drained feature in field.



Photo 9: Station R11T08-1A – Beaver Creek (Summer 2012) - Facing east, south of Concession 3, showing tile drained feature in field.



Photo 11: Station R11T08-3A – Beaver Creek (Summer 2012) - Facing upstream (north) south of Concession 3, showing channel overview.



Photo 8: Station R11T052-5 – Beaver Creek (Summer 2012) - Facing downstream (southeast) south of Silver Street, showing tile drained feature in field.



Photo 10: Station R11T08-1A – Beaver Creek (Summer 2012) - Facing downstream (south) south of Concession 3, showing tile drained feature in field.



Photo 12: Station R11T08-3A – Beaver Creek (Summer 2012) - Facing upstream (north) south of Concession 3, showing channel overview and instream vegetation.

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Photo 13: Station R11T08-3B – Beaver Creek (Summer 2012) - Facing downstream (south) south of Concession 3, showing channel overview.



Photo 15: Station R11T081-1B – Beaver Creek (Summer 2012) -Facing downstream (south) south of Concession 3, showing channel overview and surrounding long grass.



to 17: Station R11T081-A – Black Ash Creek (Summer 2012) -Facing downstream (south) off of Concession 4, showing channel overview from culvert.



Photo 14: Station R11T08-1B – Beaver Creek (Summer 2012) - Facing upstream (north) south of Concession 3, showing location of where the channel starts outside of the field.



Photo 16: Station R11T081-A – Black Ash Creek (Summer 2012) -Facing upstream (northwest) off of Concession 4, showing channel of Reed Canary Grass adjacent to manicured lawn.



Photo 18: Station R11T081-A – Black Ash Creek (Summer 2012) – Off of Concession 4, showing dry channel substrate.

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Photo 19: Station R11T097-2 – Black Ash Creek (Summer 2012) -Facing upstream (northwest) off of Silver Street, showing Channel overview and surrounded long grass.



Photo 21: Station R11T097-2 – Black Ash Creek (Summer 2012) - Off of Silver Street, showing water in channel by culvert.



Photo 23: Station R11T039 – Black Ash Creek (Summer 2012) - Facing downstream (southeast) south of Vaughan Road, showing agricultural swale.



Photo 20: Station R11T097-2 – Black Ash Creek (Summer 2012) -Facing downstream (southeast) off of Silver Street, showing channel overview.



Photo 22: Station R11T039 – Black Ash Creek (Summer 2012) - Facing upstream (northwest) south of Vaughan Road, showing agricultural swale.



Photo 24: Station R11T007 – Black Ash Creek (Summer 2012) - Facing upstream (west) north of Elcho Road, showing non-waterbody.

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Photo 25: Station R11T007 – Black Ash Creek (Summer 2012) - Facing downstream (east) north of Elcho Road, showing nonwaterbody.



Photo 27: Station R11T094-2 – Parker Creek (Summer 2012) - Facing south, north of Concession 4, showing non-waterbody.



Photo 29: Station R11T094-1 – Parker Creek (Summer 2012) - Facing downstream (southeast) north of Concession 4, showing dry channel.



Photo 26: Station R11T094-2 – Parker Creek (Summer 2012) - Facing south, north of Concession 4, showing non-waterbody.



Photo 28: Station R11T094-1 – Parker Creek (Summer 2012) - Facing upstream (northwest) north of Concession 4, showing channel and surrounding vegetation.



Photo 30: Station R11T093-1a – Parker Creek (Summer 2012) - Facing upstream (northwest) south of Concession 4, showing non-waterbody in field.

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Photo 31: Station R11T093-1a – Parker Creek (Summer 2012) -Facing downstream (southeast) south of Concession 4, showing non-waterbody in field.



Photo 33: Station R11T093-2 – Parker Creek (Summer 2012) - Facing downstream (southeast) east of Port Davidson Road, showing channel and surrounding aquatic vegetation.



Photo 35: Station R11T093-1B – Parker Creek (Summer 2012) - Facing upstream (northwest) east of Port Davidson Road, showing channel overview.



Photo 32: Station R11T093-2 – Parker Creek (Summer 2012) - Facing upstream (northwest) east of Port Davidson Road, showing channel and surrounding aquatic vegetation.



Photo 34: Station R11T093-2 – Parker Creek (Summer 2012) - East of Port Davidson Road, showing channel's substrate.



Photo 36: Station R11T093-1B – Parker Creek (Summer 2012) - Facing downstream (southeast) east of Port Davidson Road, showing channel and surrounding aquatic vegetation.

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Photo 37: Station R11T036-1 – Parker Creek (Summer 2012) - Facing upstream (west) south of Elcho Road, showing channel and riparian vegetation.



Photo 39: Station R11T038-1 – Unnamed Creek of Central Welland River (Summer 2012) - Facing upstream (north) south of Silver Street, showing channel and adjacent agricultural field.



Photo 41: Station R11T038-2 – Unnamed Creek of Central Welland River (Summer 2012) - Facing upstream (northeast) south of Silver Street, showing non-waterbody.



Photo 38: Station R11T036-1 – Parker Creek (Summer 2012) - Facing downstream (east) south of Elcho Road, showing channel overview.



Photo 40: Station R11T038-1 – Unnamed Creek of Central Welland River (Summer 2012) - Facing downstream (south) south of Silver Street, showing channel overview.



Photo 42: Station R11T038-2 – Unnamed Creek of Central Welland River (Summer 2012) - South of Silver Street, showing substrate of non-waterbody.

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Photo 43: Station R11T001-1 – Unnamed Creek of Central Welland River (Summer 2012) - Facing upstream (north) off of Vaughan Road, showing channel overview and surrounding Reed Canary Grass.



Photo 45: Station R11T076 – Unnamed Creek of Central Welland River (Summer 2012) - Facing upstream (northeast) north of Vaughan Road, showing surficial drain in agricultural field.



Photo 47: Station R11T031-8 – Unnamed Creek of Central Welland River (Summer 2012) - Facing upstream (north) off of Vaughan Road, showing dry channel and surrounding vegetation.



Photo 44: Station R11T001-1 – Unnamed Creek of Central Welland River (Summer 2012) - Facing downstream (south) off of Vaughan Road, showing channel overview and surrounding Reed Canary Grass.



Photo 46: Station R11T076 – Unnamed Creek of Central Welland River (Summer 2012) - Facing upstream (north) north of Vaughan Road, showing isolated low wet area.



Photo 48: Station R11T031-8 – Unnamed Creek of Central Welland River (Summer 2012) - Facing downstream (south) off of Vaughan Road, showing dry channel within surrounding grasses.

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Photo 49: Station R11T031-11 – Unnamed Creek of Central Welland River (Summer 2012) - Facing downstream (south) off of Vaughan Road, showing channel overview.



Photo 51: Station R11T031-10 – Unnamed Creek of Central Welland River (Summer 2012) - Facing downstream (south) south side of Vaughan Road, showing surficial drain in agricultural swale.



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Photo 53: Station R11T055 – Unnamed Creek of Central Welland River (Summer 2012) - Facing upstream (north) south of Vaughan Road, showing channel overview.



Photo 50: Station R11T031-11 – Unnamed Creek of Central Welland River (Summer 2012) - Facing downstream (south) off of Vaughan Road, showing where tile drainage begins and edge of agricultural field.



Photo 52: Station R11T055 – Unnamed Creek of Central Welland River (Summer 2012) - Facing upstream (north) south of Vaughan Road, showing channel overview.



Photo 54: Station R11T055 – Unnamed Creek of Central Welland River (Summer 2012) - South of Vaughan Road, showing channel's substrate.

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Photo 55: Station R11T032 – Unnamed Creek of Central Welland River (Summer 2012) - Facing upstream (north) off of Elcho Road, showing channel overview.



Photo 57: Station R11T032 – Unnamed Creek of Central Welland River (Summer 2012) – Off of Elcho Road, showing a close up of in stream aquatic vegetation.



Photo 59: Station R11T002-3 – Sucker Creek (Summer 2012) - Facing upstream (north) north of Vaughan Road, showing channel and thick riparian vegetation.



Photo 56: Station R11T032 – Unnamed Creek of Central Welland River (Summer 2012) - Facing downstream (south) off of Elcho Road, showing channel overview and instream vegetation.



Photo 58: Station R11T002-1 – Sucker Creek (Summer 2012) - Facing upstream (northeast) north of Vaughan Road, showing tile drained field.



Photo 60: Station R11T002-3 – Sucker Creek (Summer 2012) - Facing downstream (south) north of Vaughan Road, showing tile drained field.

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Photo 61: Station R11T002-3 – Sucker Creek (Summer 2012) - Off of Vaughan Road, showing water in channel and substrate.



Photo 63: Station R11T033-1 – Sucker Creek (Summer 2012) - Facing downstream (southwest) off of Gee Road, showing channel overview and surrounding Reed Canary Grass.



Photo 65: Station R11T002-2 – Sucker Creek (Summer 2012) - Facing upstream (northeast) off of Gee Road, showing tile-drained field.



Photo 62: Station R11T033-1 – Sucker Creek (Summer 2012) - Facing upstream (northeast) off of Gee Road, showing channel overview and surrounding Reed Canary Grass.



Photo 64: Station R11T033-1 – Sucker Creek (Summer 2012) - Off of Gee Road, showing channel's substrate.



Photo 66: Station R11T035H – Sucker Creek (Summer 2012) - Facing upstream (north) off of Gee Road, showing deeply incised channel.

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Photo 67: Station R11T035H – Sucker Creek (Summer 2012) - Facing downstream (south) off of Gee Road, showing deeply incised channel.



Photo 69: Station R11T078H – Welland River (Summer 2012) - Facing downstream (south) off of Vaughan Road, showing channel overview and adjacent field.



Photo 68: Station R11T078H – Welland River (Summer 2012) - Facing upstream (north) off of Vaughan Road, showing channel overview and adjacent field.



Photo 70: Station R11T078H-2 – Welland River (Summer 2012) -Facing upstream (north) off of Vaughan Road, showing channel overview and adjacent field.



Photo 71: Station R11T078H-2 – Welland River (Summer 2012) -Facing downstream (south) off of Vaughan Road, showing channel overview and adjacent field.



Photo 72: Station R11T029-1 – Welland River (Summer 2012) - Facing upstream (north) south of Canborough Road, showing dry channel.

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Photo 73: Station R11T029-1 – Welland River (Summer 2012) - Facing downstream (south) south of Canborough Road, showing dry channel along hedgerow.



Photo 75: Station R11T029-2 – Welland River (Summer 2012) - Facing downstream (southwest) south of Canborough Road, showing surficial drain in agricultural field.



Photo 77: Station R11T029-3 – Welland River (Summer 2012) - Facing upstream (northeast) south of Canborough Road, showing channel in forested area.



Photo 74: Station R11T029-1 – Welland River (Summer 2012) - South of Canborough Road, showing channel's substrate and aquatic invertebrates.



Photo 76: Station R11T029-2 – Welland River (Summer 2012) - Facing downstream (south) south of Canborough Road, showing surficial drain in agricultural field.



Photo 78: Station R11T029-3 – Welland River (Summer 2012) - Facing downstream (southwest) south of Canborough Road, showing channel in forested area.

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Photo 79: Station R11T029-3 – Welland River (Summer 2012) - South of Canborough Road, showing channel's pebble, sand and gravel substrate.



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Photo 1: Station R11T028 – Sixteen Mile Creek (Summer 2012) -Facing upstream (south) west of Comfort Road, showing channel and surrounding cropland.



Photo 3: Station R11T057 – Sixteen Mile Creek (Summer 2012) -Facing upstream (south) off of Book Road, showing nonwater body.



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Photo 5: Station R11T056H – Sixteen Mile Creek (Summer 2012) -Facing upstream (south) off of Fifteen Road, showing surficial drain.



Photo 2: Station R11T028 – Sixteen Mile Creek (Summer 2012) -Facing downstream (north) west of Comfort Road, showing channel and surrounding cropland.



Photo 4: Station R11T057 – Sixteen Mile Creek (Summer 2012) -Facing downstream (north) off of Book Road, showing nonwater body.



Photo 6: Station R11T056H – Sixteen Mile Creek (Summer 2012) -Facing downstream (northwest) off of Fifteen Road, showing surficial drain.

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Photo 7: Station R11T079– Sixteen Mile Creek (Summer 2012) -Facing upstream (northwest) near Victoria Avenue, showing water in channel, surrounded by riparian grasses.



Photo 9: Station R11T079 – Sixteen Mile Creek (Summer 2012) – Looking down at channel, showing turbid water and surrounding vegetation.



Photo 11: Station R11T079c – Sixteen Mile Creek (Summer 2012) -Facing downstream (east) near Victoria Avenue, showing channel overview and surrounding riparian grasses.





Photo 8: Station R11T079 – Sixteen Mile Creek (Summer 2012) -Facing downstream (east) near Victoria Avenue, showing channel overview and surrounding riparian grasses.



Photo 10: Station R11T079c – Sixteen Mile Creek (Summer 2012) – Looking down at channel, showing substrate, near Victoria Avenue.



Photo 12: Station R11T079-2a– Sixteen Mile Creek (Summer 2012) -Facing upstream (west) near Victoria Avenue, showing

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channel overview.	



Photo 13: Station R11T079-2a – Sixteen Mile Creek (Summer 2012) -Facing downstream (northeast) near Victoria Avenue, showing channel overview and instream algae.



Photo 15: Station R11T018-3 – Fifteen Mile Creek (Summer 2012) -Facing downstream (northwest) near Boyle Road, showing surficial drain in agricultural field.







Photo 14: Station R11T018-3– Fifteen Mile Creek (Summer 2012) -Facing upstream (south) near Boyle Road, showing surficial drain in agricultural field.



Photo 16: Station R11T018-2– Fifteen Mile Creek (Summer 2012) -Facing upstream (northwest) near Boyle Road, showing nonwater body in agricultural field.



Photo 18: Station R11T018-1– Fifteen Mile Creek (Summer 2012) -Facing upstream (southeast) south of Regional Road 20, showing water body and surrounding vegetation.

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Photo 19: Station R11T018-1 – Fifteen Mile Creek (Summer 2012) -Facing downstream (west) south of Regional Road 20, showing water body in agricultural field.



Photo 21: Station R11T004-2– Fifteen Mile Creek (Summer 2012) -Facing upstream (west) at intersection of Concession 4 and Hodgkins Road, showing channel overview.



Photo 23: Station R11T004-1– Fifteen Mile Creek (Summer 2012) -Facing upstream (west) at intersection of Concession 4 and Hodgkins Road, showing channel overview.





Photo 20: Station R11T059-3 – Fifteen Mile Creek (Summer 2012) – Looking down at channel, east of Rosedene Road, showing pooled water at perched culvert.



Photo 22: Station R11T004-2 – Fifteen Mile Creek (Summer 2012) -Facing downstream (east) at intersection of Concession 4 and Hodgkins Road, showing channel overview along road.



Photo 24: Station R11T004-1 – Fifteen Mile Creek (Summer 2012) –A t intersection of Concession 4 and Hodgkins Road, showing the channel's grassy substrate.

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Photo 25: Station R11T004-6– Fifteen Mile Creek (Summer 2012) -Facing upstream (south) at Concession 4, showing channel overview.



Photo 27: Station R11T004-3– Fifteen Mile Creek (Summer 2012) -Facing upstream (south) at Concession 4 and Hodgkins Road, showing channel and adjacent field.



Photo 29: Station R11T004-4– Fifteen Mile Creek (Summer 2012) -Facing upstream (south) at railroad track, south of Concession 4, showing low lying pond area.





Photo 26: Station R11T004-6 – Fifteen Mile Creek (Summer 2012) -Facing downstream (north) Concession 4, showing channel overview in field.



Photo 28: Station R11T004-3 – Fifteen Mile Creek (Summer 2012) -Facing downstream (north) Concession 4 and Hodgkins Road, showing channel overview in field.



Photo 30: Station R11T004-4 – Fifteen Mile Creek (Summer 2012) -Facing downstream (north) at railroad track, south of Concession 4. showing low lying pond area.

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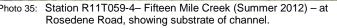
Station R11T058H-1- Fifteen Mile Creek (Summer 2012) -Photo 31: Facing upstream (west) at Concession 4, showing Reed Canary Grass channel.



Photo 33: Station R11T059-4- Fifteen Mile Creek (Summer 2012) -Facing upstream (southwest) at Rosedene Road, showing channel and long grass.



Photo 35:





Station R11T058H-1- Fifteen Mile Creek (Summer 2012) -Photo 32: Facing downstream (east) at Concession 4, showing channel overview and adjacent field.



Photo 34: Station R11T059-4- Fifteen Mile Creek (Summer 2012) -Facing upstream (southwest) at Rosedene Road, showing channel and long grass.



Photo 36: Station R11T059-2- Fifteen Mile Creek (Summer 2012) -Facing upstream (southeast) East of Rosedene Road, showing dry channel and surrounding vegetation.

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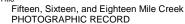






Photo 37: Station R11T059-2– Fifteen Mile Creek (Summer 2012) – East of Rosedene Road, showing substrate of dry channel.



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Photo 1: Station R11T042-2 –Dent Drain (Summer 2012) - Facing upstream (northeast) south of Highway 3, showing channel overview and adjacent agricultural fields.



Photo 3: Station R11T098-1 –Dent Drain (Summer 2012) - Facing upstream (east) south of Highway 3, showing channel within riparian vegetation.



Photo 5: Station R11T098-3 –Dent Drain (Summer 2012) - Facing upstream (north) south of Highway 3, showing channel within riparian vegetation.



Photo 2: Station R11T042-2 –Dent Drain (Summer 2012) – Facing downstream (southwest) south of Highway 3, showing channel overview.



Photo 4: Station R11T098-1 –Dent Drain (Summer 2012) – Facing downstream (west) south of Highway 3, showing channel overview adjacent to manicured lawn.



Photo 6: Station R11T098-3 –Dent Drain (Summer 2012) – Facing downstream (south) south of Highway 3, showing channel and riparian vegetation.

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Photo 7: Station R11T098-3 –Dent Drain (Summer 2012) – South of Highway 3, showing channel substrate comprised of leaves and sticks.



Photo 9: Station R11T099-1 –West Kelly Drain (Summer 2012) – Facing downstream (south) west of Inman Road, showing channel and riparian vegetation.





Photo 8: Station R11T099-1 –West Kelly Drain (Summer 2012) Facing upstream (north) west of Inman Road, showing channel within riparian vegetation.



Photo 10: Station R11T045-1 –Broad Creek Drain (Summer 2012) -Facing upstream (east) south of Canal Bank Road, showing channel overview.



Photo 12: Station R11T045-1 –Broad Creek Drain (Summer 2012) – South of Canal Bank Road, showing algae and substrate of channel.

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Photo 13: Station R11T045-2 –Broad Creek Drain (Summer 2012) -Facing upstream (north) south of Canal Bank Road, showing channel overview alongside road.



Photo 15: Station R11T045-2 –Broad Creek Drain (Summer 2012) – South of Canal Bank Road, showing substrate of channel, comprised of detritus, muck and silt.



Photo 17: Station R11T017 and 47 –Broad Creek Drain (Summer 2012) – Facing downstream (west) east of Bird Road, showing channel adjacent to agricultural field.



Photo 14: Station R11T045-2 –Broad Creek Drain (Summer 2012) Facing downstream (south) south of Canal Bank Road, showing channel adjacent to agricultural field.



Photo 16: Station R11T017 and 47 –Broad Creek Drain (Summer 2012) – Facing upstream (northeast) east of Bird Road, showing channel adjacent to agricultural field.



Photo 18: Station R11T017 and 47 –Broad Creek Drain (Summer 2012) – East of Bird Road, showing aquatic vegetation within channel.

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Photo 19: Station R11T005-3–Broad Creek Drain (Summer 2012) -Facing upstream (east) north of Rymer Road, showing channel adjacent to agricultural field.



Photo 21: Station R11T005-3–Broad Creek Drain (Summer 2012) – North of Rymer Road, showing substrate and turbid water from culvert.



Photo 23: Station R11T005-1–Broad Creek Drain (Summer 2012) – Facing downstream (south) north of Rymer Road, showing dry channel overview.



Photo 20: Station R11T005-3–Broad Creek Drain (Summer 2012) – Facing downstream (west) north of Rymer Road, showing channel overview.



Photo 22: Station R11T005-1–Broad Creek Drain (Summer 2012) – Facing upstream (north) north of Rymer Road, showing dry channel.



Photo 24: Station R11T005-1–Broad Creek Drain (Summer 2012) -North of Rymer Road, showing substrate of channel, comprised of muck and silt.

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Photo 25: Station R11T045-3–Broad Creek Drain (Summer 2012) – Facing upstream (north) south of Canal Bank Road, showing shallow channel on edge of agricultural field.



Photo 27: Station R11T045-3–Broad Creek Drain (Summer 2012) – South of Canal Bank Road, showing substrate of channel, comprised of muck and silt and detritus.



Photo 29: Station R11T062-1–Tweed Drain (Summer 2012) – Facing downstream (north) west of Hutchinson Road, showing channel overview.



Photo 26: Station R11T045-3–Broad Creek Drain (Summer 2012) -Facing downstream (south) south of Canal Bank Road, showing overview.



Photo 28: Station R11T062-1–Tweed Drain (Summer 2012) – Facing downstream (east) west of Hutchinson Road, showing overview.



Photo 30: Station R11T062-2–Tweed Drain (Summer 2012) – Facing upstream (north) west of Hutchinson Road, showing channel between road and field.

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Photo 31: Station R11T062-2–Tweed Drain (Summer 2012) – Facing downstream (south) west of Hutchinson Road, showing channel full of vegetation.



Photo 33: Station R11T096-1–Tweed Drain (Summer 2012) – Facing upstream (northeast) off of Bird Road, showing shallow, dry channel.



Photo 35: Station R11T096-1–Tweed Drain (Summer 2012) – Off of Bird Road, showing substrate of channel, comprised of muck and vegetation.



Photo 32: Station R11T062-2–Tweed Drain (Summer 2012) – West of Hutchinson Road, showing substrate of channel, comprised of muck and vegetation.



Photo 34: Station R11T096-1–Tweed Drain (Summer 2012) – Facing downstream (west) off of Bird Road, showing channel overview.



Photo 36: Station R11T099-2–Tweed Drain (Summer 2012) – Facing upstream (west) off of Inman Road, showing channel from culvert.

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Photo 37: Station R11T099-2–Tweed Drain (Summer 2012) – Facing downstream (east) off of Inman Road, showing channel overview.



Photo 39: Station R11T020-1–Tweed Drain (Summer 2012) – Facing upstream (north) off of Inman Road, showing channel overview and riparian vegetation.



Photo 41: Station R11T020-1–Tweed Drain (Summer 2012) – Off of Inman Road, showing close up of channel's substrate.



Photo 38: Station R11T099-2–Tweed Drain (Summer 2012) – Off of Inman Road, showing close up of channel from culvert.



Photo 40: Station R11T020-1–Tweed Drain (Summer 2012) – Facing downstream (south) off of Inman Road, showing channel overview and adjacent road and field.

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Photo 1: Station R11T016-1 – Low Banks Drain (Summer 2012) -Facing upstream (south) south of Canal Bank Road, showing channel and adjacent fields.



Photo 3: Station R11T044-1 – Low Banks Drain (Summer 2012) -Facing upstream (northeast) south of Canal Bank Road, showing channel, adjacent forest and field.



Photo 5: Station R11T014, 15, 44, 43 – Low Banks Drain (Summer 2012) - Facing upstream (south) south of Canal Bank Road, showing channel overview.



Photo 2: Station R11T016-1 – Low Banks Drain (Summer 2012) -Facing downstream (north) south of Canal Bank Road, showing channel and adjacent fields.



Photo 4: Station R11T044-1 – Low Banks Drain (Summer 2012) -Facing downstream (southwest) south of Canal Bank Road, showing channel and treed riparian area.



Photo 6: Station R11T014, 15, 44, 43 – Low Banks Drain (Summer 2012) - Facing downstream (north) south of Canal Bank Road, showing channel overview.

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Lake Erie North Shore PHOTOGRAPHIC RECORD





Photo 7: Station R11T014, 15, 44, 43 – Low Banks Drain (Summer 2012) - South of Canal Bank Road, showing water and instream aquatic vegetation.



Photo 9: Station R11T061-1 – Low Banks Drain (Summer 2012) -Facing downstream (west) north of Lakeshore Road, showing channel overview.



Photo 11: Station R11T049-1 – Hoover Drain (Summer 2012) - Facing upstream (north) north of Lakeshore Road, showing channel within forested area.



Photo 8: Station R11T061-1 – Low Banks Drain (Summer 2012) -Facing upstream (east) north of Lakeshore Road, showing channel within Reed Canary Grass.



Photo 10: Station R11T061-1 – Low Banks Drain (Summer 2012) -North of Lakeshore Road, showing water and grass in channel.



Photo 12: Station R11T049-1 – Hoover Drain (Summer 2012) - Facing downstream (south) north of Lakeshore Road, showing channel within forested area.

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Lake Erie North Shore PHOTOGRAPHIC RECORD





Photo 1: Station R11T088-2 – North Creek (Summer 2012) - Facing upstream (west) from Woods Road, showing non-water body.



Photo 3: Station R11T088-1A – North Creek (Summer 2012) - Facing upstream (west), showing channel overview.



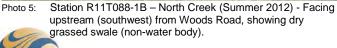






Photo 2: Station R11T088-2 – North Creek (Summer 2012) – Facing downstream (east) from Woods Road, showing channel in mid-foreground.



Photo 4: Station R11T088-1A – North Creek (Summer 2012) - Facing downstream (east), showing dry channel with cobble/boulder substrate. Note channel disappears approximately 20 m downstream, prior to west limit of Project Location.



Photo 6: Station R11T088-1B – North Creek (Summer 2012) - Facing downstream (northeast) from Woods Road, defined channel Client Project left foreground). November 2012

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Twenty Mile Creek PHOTOGRAPHIC RECORD



Photo 7: Station R11T083-1 – North Creek (Summer 2012) - Facing upstream (south) from Woods Road, showing agricultural swale.



Photo 8: Station R11T083-1 – North Creek (Summer 2012) - Facing downstream (north) from Woods Road, showing agricultural swale.



Photo 9: Station R11T085-1 – North Creek (Summer 2012) - Facing upstream (west) from Minor Road, showing non-water body.



Photo 10: Station R11T085-1 – North Creek (Summer 2012) - Facing downstream (east) from Minor Road, showing agricultural swale.



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Twenty Mile Creek PHOTOGRAPHIC RECORD



Photo 1: Station R11T095-1 – Tributary to Welland River (Summer 2012) - Facing upstream (northwest) from Sideroad 42, showing non-water body.



Photo 2: Station R11T095-1 – Tributary to Welland River (Summer 2012) - Facing downstream (south) from Sideroad 42, showing non-water body.



Photo 3: Station R11T091-1 – Unnamed Tributary to Upper Welland River (Summer 2012) - Facing downstream (southeast) east of Gore Road, showing channel overview next to farm path.



Photo 5: Station R11T041-2 – Unnamed Tributary to Upper Welland River (Summer 2012) - Facing upstream (southeast) east of Gore Road, showing channel overview.





Photo 4: Station R11T091-1 – Unnamed Tributary to Upper Welland River (Summer 2012) - Facing downstream (southeast) east of Gore Road, showing pooled water and algae in channel.



Photo 6: Station R11T041-2 – Unnamed Tributary to Upper Welland River (Summer 2012) - Facing downstream (southeast) east of Gore Road, showing channel overview.

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Upper Welland River PHOTOGRAPHIC RECORD



Photo 7: Station R11T072-1 – Unnamed Tributary to Upper Welland River (Summer 2012) - Facing upstream (north) east of Gore Road, showing channel overview.



Photo 9: Station R11T072-1 – Unnamed Tributary to Upper Welland River (Summer 2012) – showing substrate of channel bed.



Photo 11: Station R11T041-1 – Unnamed Tributary to Upper Welland River (Summer 2012) - Facing downstream (northeast) east of Gore Road, showing channel and culvert.





Photo 8: Station R11T072-1 – Unnamed Tributary to Upper Welland River (Summer 2012) - Facing downstream (south) east of Gore Road, showing channel and culvert.



Photo 10: Station R11T041-1 – Unnamed Tributary to Upper Welland River (Summer 2012) - Facing upstream (southwest) east of Gore Road, showing channel overview.

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Upper Welland River PHOTOGRAPHIC RECORD